

REMARKS

This is intended as a full and complete response to the Final Office Action dated August 23, 2007, having a shortened statutory period for response set to expire on November 23, 2007. Please reconsider the claims pending in the application for reasons discussed below.

Claim Rejections 35 U.S.C. § 102

Claims 21-26, 31, and 32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Hay et al.* (US 6,278,811 B1). In response, Applicants respectfully traverse the rejection.

Claim 21 recites that "the mandrel is non-rigidly coupled to the housing." As stated by the Examiner, "column 7 lines 3-7 of *Hay et al.* discloses that the O-ring provides for hermetic seal between the housing interior and the exterior." Even though the O-ring has compliancy to achieve this sealing purpose as commonly provided by O-rings between two members, there is no indication in *Hay et al.* that the compliancy in some way provides non-rigid coupling, such as recited in claim 21. The compliancy of any O-ring facilitates sealing even if the two members that the O-ring is disposed between are attached to one another in a rigid manner. For example, an O-ring, in one exemplary use for blocking a potential leak path, may fill a set gap that cannot change due to rigid affixing of parts providing the gap.

Furthermore, Figure 4 of *Hay et al.* does not illustrate any clearance between the housing and a fiber mount that the O-ring is disposed around, as is required in order for the compliancy of the O-ring to hypothetically enable non-rigid coupling. By contrast, Figure 6A of the current application shows such necessary clearance to take advantage of the compliancy of the O-rings. Paragraph [0096] of the present specification, states that if

counter-rotation pins are present they do not provide primary support and likewise have clearance within counter-rotation holes.

Based on the foregoing, *Hay et al.* fails to teach, show or suggest each and every element of claim 21. *Hay et al.* cannot anticipate claim 21 or any claims dependent thereon. Accordingly, Applicants request withdrawal of the rejection and allowance of claims 21-26, 31, and 32.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 6, 8-13, and 15-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hay et al.* (US 6,278,811 B1). In response, Applicants respectfully traverse the rejection.

Claim 1 recites that a "mandrel pre-defines at least one groove for routing the optical fiber and wherein the at least one groove comprises a spiral groove on an end of the mandrel." Applicants have accordingly canceled claim 16 since claim 1 has been amended to include the limitation of previous claim 16. First, *Hay et al.* does not provide any reasoning for any specific pattern for a hypothetical predefined groove much less "a spiral groove on an end of the mandrel." In particular, it is unclear how such a groove would be utilized in *Hay et al.* or what benefit it would provide.

Secondly, it is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record as the principal evidence upon which a rejection is based. In re Zurko, 258 F.3d 1379, 1385 (Fed. Cir., 2001); MPEP § 2144.04. Specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. Any facts, such as the Examiner's assertion relating to pre-defined grooves in fiber mandrels being well known to be advantageous and desirable, should be of a notorious character and serve only to "fill in the gaps" of

peripheral issues in an insubstantial manner. However, the Examiner presently relies solely on this common knowledge assertion to satisfy a missing element recited in the claims in order to make the obviousness rejection since as the Examiner states *Hay et al.* "does not explicitly teach the use of pre-defined grooves on the mandrel."

For the foregoing reasons, the factual assertion is not only insufficient with respect to each and every element of claim 1 but also (i) not properly officially noticed and (ii) not properly based upon common knowledge. Thus, *Hay et al.* fails to teach, show or suggest each and every limitation of claim 1. Accordingly, Applicant respectfully requests withdrawal of the rejection and allowance of the claims 1, 6, 8-13, and 15-18.

Claims 19-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hay et al.* in view of *Mendez et al.* ("Micromachined Fabry-Perot interferometer with corrugated silicon diaphragm for fiber optic sensing applications"). In response, Applicants respectfully traverse the rejection. *Mendez et al.* fails to overcome the deficiencies of *Hay et al.* as set forth with respect to claim 1, from which claims 19 and 20 depend. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of claims 19 and 20.

Allowable Subject Matter

Claims 33-36, 38, and 39 are allowed. Applicants acknowledge allowance of the claims.

Conclusion

Having addressed all issues set out in the Final Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Although Applicants believe that no additional fees are due in connection with this response, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 20-0782/WEAT/0471.P1/RWR, for any fees, including extension of time fees or excess claim fees, required to make this response timely and acceptable to the Office.

Dated: October 22, 2007

Respectfully submitted,

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